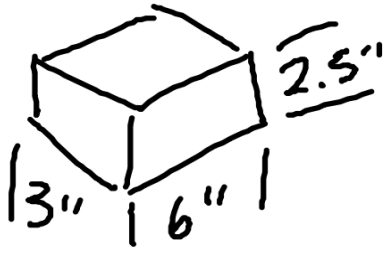
Convert 35 mi to km

$$\frac{35\text{ mi}}{1} \times \frac{1.61\text{ km}}{1\text{ mi}} = 56.35\text{ km}$$

Convert 370# to kg

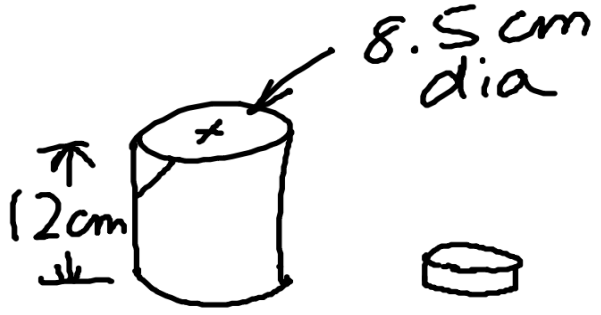
$$\frac{370 \text{ lbs}}{1} \times \frac{1 \text{ kg}}{2.20 \text{ lbs}} = \frac{370 \text{ kg}}{2.20} = 168.18 \text{ kg}$$

FIND VOLUME of BRICK



$V = 3 \cdot 6 \cdot 2.5 =$

$45 in^3$



$h = 12\,cm$

$d = 8.5\,cm$

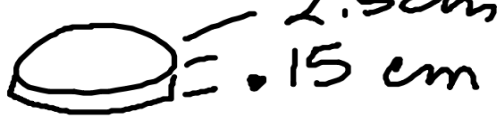
$r = \frac{d}{2} = 4.25\,cm$

$V_{CYLINDER} = \pi r^2 h$

$= \pi (4.25\,cm)^2 \times 12\,cm$

$= 680.94\,cm^3$

Volume of QUARTER



$d = 2.5\,cm$

$h = .15\,cm$

$r = \frac{d}{2} = 1.25cm$

$V_{CYL} = \pi r^2 h$

$= \pi (1.25cm)^2 (.15\,cm)$

$= .74\,cm^3$

Sphere

dia = 23 cm r = 11.5 cm

$$V_{sph} = \frac{4}{3}\pi r^3$$

$$= \frac{4}{3}\pi \; 11.5\,cm \times 11.5\,cm \times 11.5\,cm$$

$$= 6370.63\,cm^3$$